

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF NURSERY ROAD AND SOUTHBOUND MD 295 OFF-RAMP IN ANNE ARUNDEL COUNTY. NURSERY ROAD IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR PHASE. FULL-TRAFFIC-ACTUATED MODE WITH NURSERY ROAD THROUGH MOVEMENTS OPERATING CONCURRENTLY AND THE S.B. MD 295 OFF-RAMP APPROACH OPERATING ALONE. AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR N.B. NURSERY ROAD EXIST.

CONTROLLER REQUIREMENTS

A FULL-TRAFFIC-ACTUATED, FOUR-PHASE CONTROLLER EXISTS. INSTALL ONE 4-CHANNEL TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER IN THE EXISTING BASE MOUNTED CABINET.

PHASING WILL NOT CHANGE

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR
ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO OOTS FOR APPROVAL PRIOR TO INSTALLATION.

SIGNALIZATION

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
8004	1 EA	ADJUST EXISTING HANDHOLE TO GRADE INCLUDING COLLAR
8009	12 EA	FURNISH AND INSTALL 12 IN. OPTICALLY PROGRAMMED SIGNAL HEAD SECTION
8044	2 EA	FURNISH AND INSTALL NON-EVASIVE PROBE 500 FT. LEAD-IN
8048	LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8052	45 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8068	25 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
8072	2 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8081	130 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (ALUMINUM SHIELDED)
8087	875 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8088	290 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL LOOP DETECTOR
8091	100 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
---	1 EA	FURNISH AND INSTALL 4-CHANNEL TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER
---	1 EA	RELOCATE EXISTING SIGN
---	1 EA	FURNISH AND INSTALL R3-5(R) SIGN (30" X 36") MAST ARM MOUNT
---	1 EA	FURNISH AND INSTALL R3-6(L) SIGN (30" X 36") MAST ARM MOUNT

LIGHTING

ITEM NO.	QUANTITY	DESCRIPTION
---	5 CY	FURNISH AND INSTALL CONCRETE FOR LIGHTING FOUNDATION
---	1260 LF	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
---	2 EA	FURNISH AND INSTALL ELECTRIC MANHOLE
---	980 LF	FURNISH AND INSTALL 4-CONDUCTOR (NO. 2 A.W.G.) DUCT CABLE
---	290 LF	FURNISH AND INSTALL 2-CONDUCTOR (NO. 2 A.W.G.) DUCT CABLE
---	5 EA	FURNISH AND INSTALL GROUND ROD - 3/4"x10' LENGTH
---	100 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT (BORED)
---	2 EA	RELOCATE EXISTING STREET LIGHT STRUCTURE
---	2 EA	REMOVE EXISTING ELECTRIC MANHOLE
---	6 EA	FURNISH AND INSTALL TYPE I CONNECTOR KIT
---	6 EA	FURNISH AND INSTALL TYPE III CONNECTOR KIT
---	8 EA	FURNISH AND INSTALL TYPE IV CONNECTOR KIT
---	10 EA	FURNISH AND INSTALL TYPE II CONNECTOR KIT

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANDOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL OTHER SHALL BECOME THE PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST "A"

A. APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MR. LARRY ELLIOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 841-1003

MR. CHARLES GEORGE
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1005

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 841-1005

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

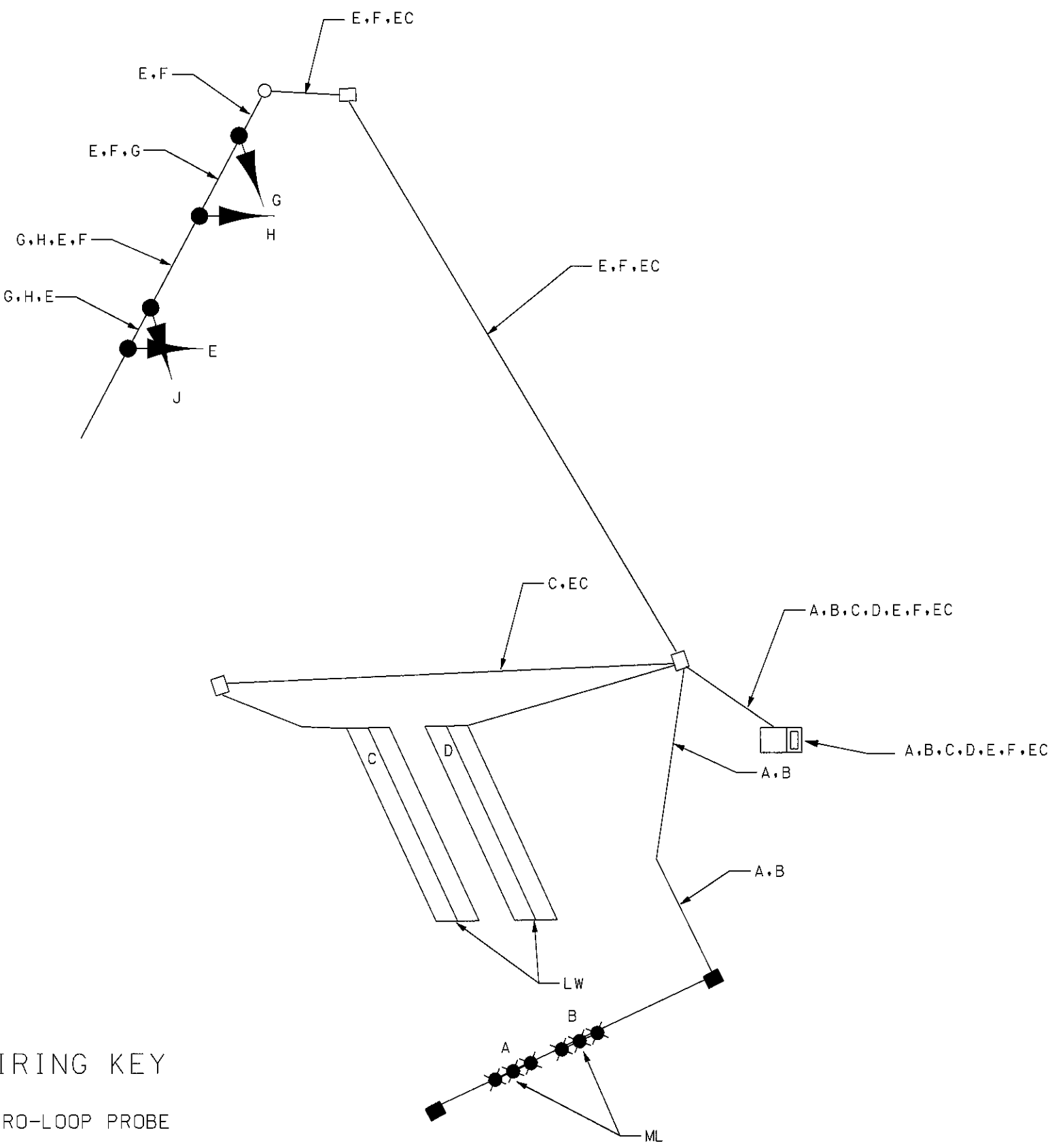
MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

WIRING DIAGRAM



WIRING KEY

A-B MICRO-LOOP PROBE
C-D 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
E-F EXISTING 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
G-H EXISTING 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
EC EXISTING CABLE
ML MICRO-LOOP PROBE
LW LOOP WIRE (NO. 14 A.W.G.)

TRAFFIC CONCEPTS, INC.

325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION
NURSERY ROAD AT S.B. I-295 RAMP

DRAWN BY: M.HOWELL	F.A.P. NO. 2177B	TS. NO. 2177B	SHEET NO. 3 OF 3
CHECKED BY: T.ZAYDEL	S.H.A. NO.		
SCALE: 1" = 20'	COUNTY: ANNE ARUNDEL	T.I.M.S. NO. F308	
DATE: 9-6-02	LOG MILE: 02-029514.76		

Date updated: 11/08/02